



Request For USDA State & Private Forestry Grant

Applicant: Georgia Forestry Commission P.O. Box 819 Macon, GA 31202

Project Name: "Montane Longleaf Seed Orchard"

Project Lead: Russ Pohl, Macon, GA 478-751-3520, rpohl@gfc.state.ga.us

Project Proposal Abstract: Montane (interior) longleaf has recently become a desirable pine species for planting in the upper piedmont of Georgia as an alternative to beetle-susceptible loblolly and shortleaf pines. Appropriate seeds for regeneration are frequently in short supply. With funding, the Georgia Forestry Commission will establish a seedling seed orchard using a sampling from various sources from northeast Georgia and north-central Alabama.

Partnering Agencies and Groups / Individuals: USDA, Forest Service, Region 8; Alabama Forestry Commission

Project Location: Arrowhead Seed Orchard, Pulaski County, Georgia

Expected Completion Quarter: (i.e., Q4 2010)

Total Federal Funding Request: \$145,000.00

**Total Proposal Budget
(Including Matching Funds):**

Cost Category	Requested Funds	Matching Funds	Total
Personnel	\$36,000.00	\$102,000.00	\$138,000.00
Materials & Supplies	\$35,000.00	\$5,000.00	\$40,000.00
Travel	\$3,000.00	00.00	\$3,000.00
Consultants	\$2,000.00	00.00	\$2,000.00
Overhead / Administration	\$15,000.00	\$24,000.00	\$39,000.00
Equipment	\$35,000.00	\$12,000.00	\$47,000.00
Printing	\$3,000.00	00.00	\$3,000.00
Other	\$16,000.00	\$10,000.00	\$26,000.00
TOTALS	\$145,000.00	\$153,000.00	\$298,000.00

Project Description and Benefits:

The **Montane Longleaf Orchard** project is designed to develop and improved seed source of longleaf pine adapted to the Piedmont of western Georgia and north-central Alabama. The 5 acre plantation will consist of seedlings grown from wild collections made across the above mentioned range. As the plantation matures it will be thinned to promote health and vigor and to encourage the best individuals representing the best families from the best stands. Ultimately, the individuals will comprise a genetically diverse mix of longleaf pine from above the fall-line, and will produce seeds of superior quality.

The **Montane Longleaf Orchard** project is designed to benefit the forest in the following ways relative to our national interests:

Enhance Working Forest Landscape – The forests of the Southeast are periodically devastated by southern pine beetle outbreaks. Some landowners are hesitant to reforest with beetle susceptible loblolly and shortleaf pines. Montane longleaf is a reasonable alternative and can provide fiber, wildlife habitat, and environmental benefits to portions of northwest Georgia and north Alabama.

Protect Forest From Harm – Montane longleaf is beetle resistant, fire resistant, and less susceptible to many of the insects and diseases that affect other pine species in the region.

Enhance Benefits Associated With Trees & Forests – Longleaf pine is an excellent wildlife species. Its characteristic resistance to damage from wildfire makes it a suitable alternative to other pines. Its hardiness serves to protect soil and landscapes from erosive forces, protecting habitat and watersheds.

The proposed project will have a positive impact on the following regional issues:

Fractured Forests – Alternatives to loblolly and shortleaf pines will encourage landowners to reestablish pines in areas devastated by beetles, keeping forests intact.

Wildland Fire and Forest Fuels – Beetle killed forest stands produce very high fuel levels threatening increasing populated areas of northwest Georgia. Maintaining healthy, vigorous stands will reduce the threat of harmful wildfire.

Forest Health – Areas of longleaf pine can slow or stop the spread of pine beetles when breaking up continuous stands of loblolly or shortleaf.

Water Quality and Quantity – Healthy, vigorous stands of any species help to control erosion, improve water quality and quantity. To the extent that montane longleaf replaces beetle infested pine stands, water quality will be enhanced.

Project Evaluation Criteria Discussion:

The **Montane Longleaf Orchard** project meets the established criteria in the following ways:

National and Regional Relevance – A montane longleaf seed source could provide seeds for reforestation across a significant portion of the Southeast. Northern source longleaf has a range extending from northwest-central Georgia to north-central Alabama.

Prioritization – The area where a northern source of longleaf pine is targeted has recently been devastated by southern pine beetles. It is also an area growing in population. These landowners must have viable alternatives that will encourage reforestation.

Meaningful Scale – The target area for the seed from this orchard extends across the northwest quadrant of Georgia through much of north-central Alabama

Collaboration – The USFS, Region 8, has agreed to provide seed from the Talledega N.F. GFC foresters are collecting seeds within the state of Georgia. The Alabama Forestry Commission is also collaborating.

Outcomes – A viable source of “improved” seed will result from this project.

Influence Positive Change – There is no other source of improved montane longleaf. This orchard will provide an opportunity for researchers unavailable anywhere else.

Timelines –

- Year 1: Collect seeds
- Year 2: Grow seedlings in shadehouse
- Year 3: Outplant the seedlings into the orchard